

WHAT IS CLAIMED IS:

1. A network device, comprising:
 - a port to allow the device to communicate with a called endpoint;
 - a processor to:
 - 5 send a call request message associated with a call to the called endpoint; and
 - indicate a desire to delay call establishment until a delay point is reached.
2. The network device of claim 1, the processor further to receive a notification that a delay point has been reached.
3. The network device of claim 1, the processor further to determine if the call is to be 10 established and, if the call is to be established, notify the called endpoint.
4. The network device of claim 1, the network device comprising a calling endpoint.
5. A method of delaying call establishment, the method comprising:
 - transmitting a call request message associated with a call to a called endpoint
 - identifying a delay point.
- 15 6. The method of claim 5, the method comprising receiving a notification from the called endpoint that the delay point has been reached.
7. The method of claim 5, the method comprising determining if the call is to be established.
8. The method of claim 5, the method comprising notifying the called endpoint if the call is to be established.
- 20 9. The method of claim 5, the method comprising performing maintenance testing without notifying the called endpoint to start alerting a called user, wherein maintenance comprises at least one of the group comprised of: quality of service (QoS) testing, service level verification, probing endpoints, querying for services supported by a device, etc.
10. The method of claim 5, transmitting a call request message comprising transmitting a 25 session initiation protocol INVITE message.

11. The method of claim 5, transmitting a call request message comprising transmitting an H.323 Setup message.
12. The method of claim 5, transmitting a call request message further comprising transmitting a call setup message including a delayed call establishment capability
- 5 advertisement.
13. The method of claim 5, receiving a notification from the called endpoint comprising a Delay Point Reached message.
14. The method of claim 5, notifying the called endpoint further comprising sending a Delayed Call Establishment Release message.
- 10 15. A method of delayed call establishment, the method comprising:
 - receiving a call request message associated with a call indicating a need for delayed call establishment and identifying a delay point.
16. The method of claim 15, the method comprising
 - transmitting a response indicating availability of delayed call establishment; and
 - 15 progressing the call to the delay point.
17. The method of claim 15, the method comprising notifying a calling endpoint that that delay point has been reached.
18. The method of claim 15, the method comprising processing the call as indicated by the calling endpoint.
- 20 19. The method of claim 15, processing the call comprising alerting a user, of a called endpoint, of the call.
20. The method of claim 15, processing the call comprising performing maintenance or other tasks without alerting the user.
21. A network device, comprising:
 - 25 a port to allow the device to communicate with a calling endpoint;
 - a processor to:

receive a call request message associated with a call from the calling endpoint; respond with a notification of delayed call establishment availability; and process the call to a delay point.

22. The network device of claim 21, the processor further to transmit a notification that a
5 delay point has been reached

23. The network device of claim 21, the processor further to determine if the call is to be established and, if the call is to be established, notify a user.

24. The network device of claim 21, the network device comprising a called endpoint.

25. The network device of claim 21, the calling endpoint comprising an intermediary.

10 26. An article of machine-readable media containing instructions that, when executed, cause the machine to:

transmit a call request message associated with a call to a called endpoint identifying a delay point.

27. The article of claim 26, the instructions further causing the machine to receive a
15 notification from the called endpoint that the delay point has been reached.

28. The article of claim 26, the instructions further causing the machine to determine if the call is to be established.

29. The article of claim 26, the instructions further causing the machine to notify the called endpoint if the call is to be established.

20 30. The article of claim 26, the instructions further causing the machine to perform maintenance testing without notifying the called endpoint to start alerting a called user, wherein maintenance comprises at least one of the group comprised of: quality of service (QoS) testing, service level verification, probing endpoints, querying for services supported by a device, etc.

25 31. An article of machine-readable media containing instructions that, when executed, cause the machine to:

receive a call request message associated with a call indicating a need for delayed call establishment and identifying a delay point.

32. The article of claim 31, the instructions further causing the machine to transmit a response indicating availability of delayed call establishment; and

5 progress the call to the delay point.

33. The article of claim 31, the instructions further causing the machine to notify a calling endpoint that that delay point has been reached.

34. The article of claim 31, the instructions further causing the machine to process the call as indicated by the calling endpoint.

10 35. A network device, comprising:

a means for allowing the device to communicate with a called endpoint;

a means for sending a call request message associated with a call to the called endpoint; and

a means for indicating a desire to delay call establishment until a delay point is reached.

15 36. A network device, comprising:

a means for allowing the device to communicate with a calling endpoint;

a means for receiving a call request message associated with a call from the calling endpoint;

20 a means for responding with a notification of delayed call establishment availability; and

a means for processing the call to a delay point.